

Title (en)  
POSITION SENSOR

Title (de)  
POSITIONSENSOR

Title (fr)  
CAPTEUR DE POSITION

Publication  
**EP 3136056 A1 20170301 (EN)**

Application  
**EP 16185084 A 20160822**

Priority  
JP 2015166026 A 20150825

Abstract (en)  
A position sensor detects the position of a shift lever (3) that is moved along a shift pattern (4) extending in three different directions from a neutral position. The position sensor includes a magnet (7) that moves together with the shift lever (3) when the shift lever (3) is moved between the neutral position and any one of a reverse position, a drive position, and a home position, which are located in three directions from the neutral position. The position sensor also includes Hall IC elements (11-16) that detect the magnet (7) and generate outputs indicating detection of the magnet (7). The Hall IC elements (11-16) are laid out so that the position of the shift lever (3) can be determined from the outputs of the Hall IC elements (11-16).

IPC 8 full level  
**G01D 5/14** (2006.01); **F16H 59/10** (2006.01); **G01D 5/244** (2006.01)

CPC (source: EP US)  
**F16H 59/105** (2013.01 - EP US); **G01D 5/142** (2013.01 - US); **G01D 5/145** (2013.01 - EP US); **G01D 5/24461** (2013.01 - EP US)

Citation (applicant)  
JP 2014020922 A 20140203 - TOKAI RIKI CO LTD

Citation (search report)  
• [X] JP 2007223384 A 20070906 - TSUDA IND CO LTD  
• [X] JP 2011105168 A 20110602 - FUJI KIKO KK, et al  
• [A] US 2010090689 A1 20100415 - FURUKI SHIGERU [JP], et al  
• [A] US 2004035237 A1 20040226 - MATSUI KAZUHITO [JP], et al

Cited by  
WO2019012035A1; US11353313B2

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**EP 3136056 A1 20170301; EP 3136056 B1 20190508**; JP 2017045190 A 20170302; US 2017059358 A1 20170302

DOCDB simple family (application)  
**EP 16185084 A 20160822**; JP 2015166026 A 20150825; US 201615238170 A 20160816